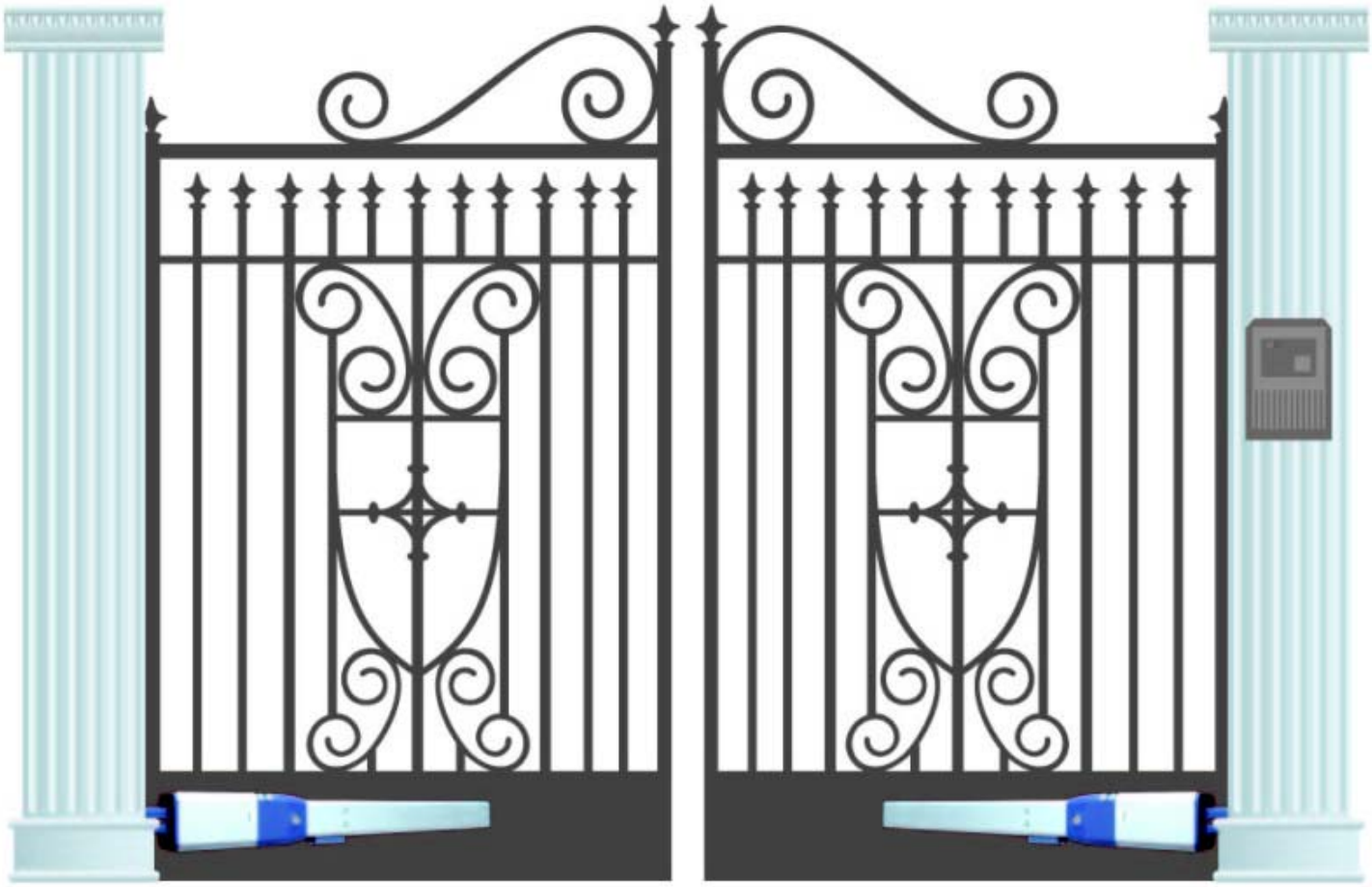
EASYJACK™

USER'S MANUAL

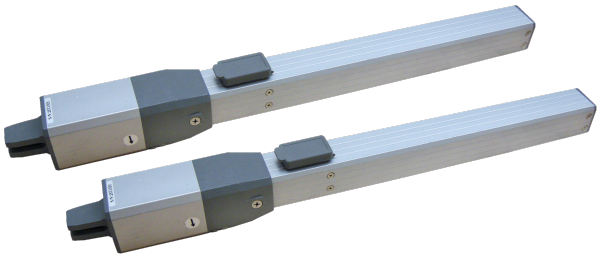
SWING GATE OPENER



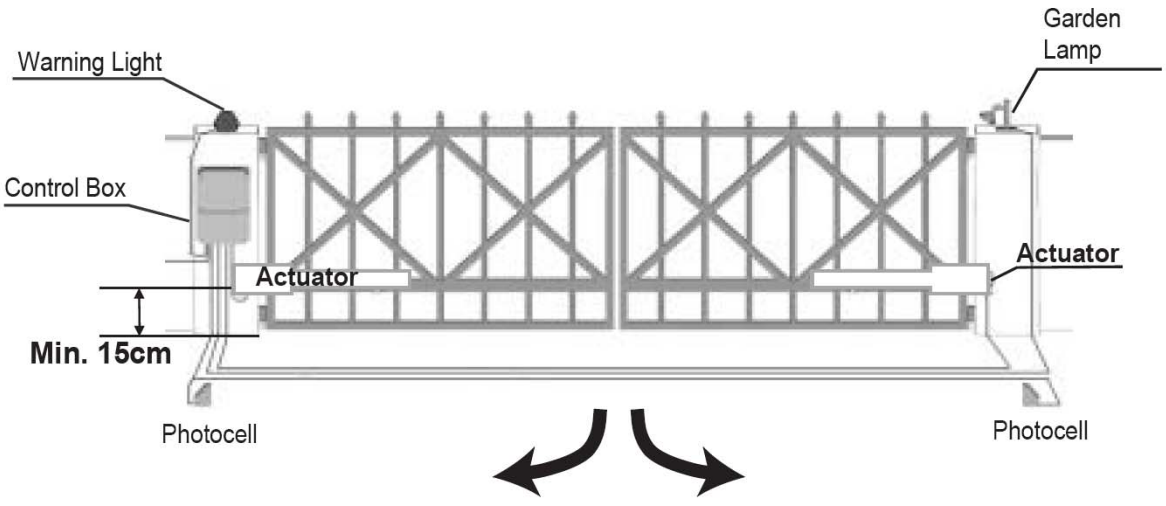
Important Safety Advice:

1. Knowledge of the relevant electro-technical regulations is required.
2. Training in use and maintenance of safety equipments is necessary.
3. Professional assistance is required when some mechanism adjustment is needed.
4. Always lay mains and control cables separately.
5. Test every equipment before initial operation.
6. Make familiar with the use of the system before initial operation.

Contents of the Kit:

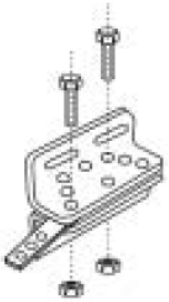


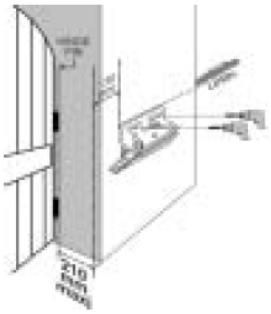
Wiring Diagram:

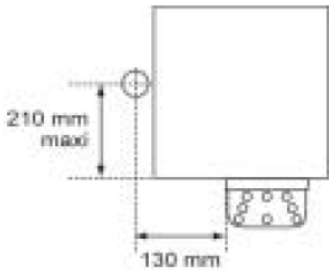


Instruction of Installation:

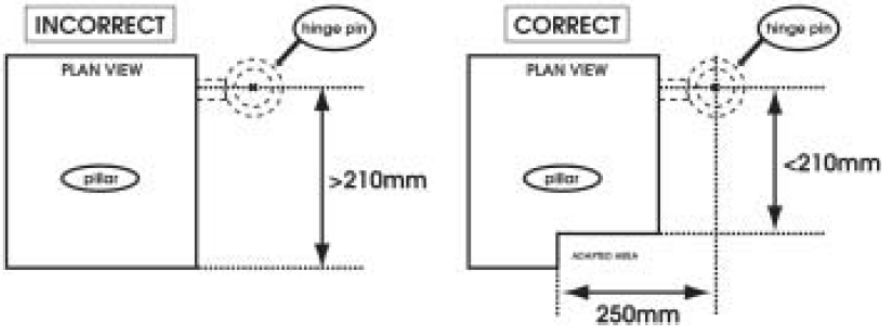
1. Assemble the metal fixing brackets for the gate pillars.
   And then fix the bracket to the pillar.



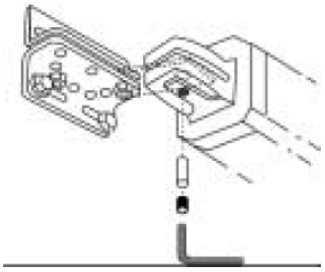




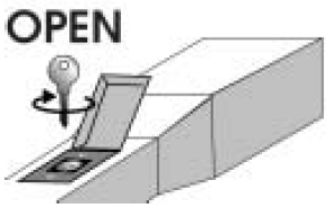
IMPORTANT.
If the hinge of your gate is more than 210mm from the edge of the pillar, it is necessary to adapt the pillar to ensures the hinge is less than 210mm from the edge of the pillar.

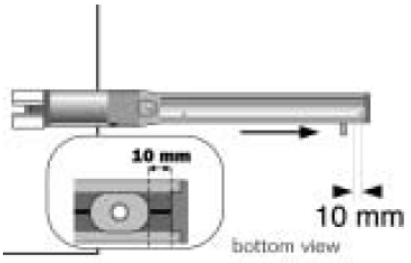


2. Fix the actuator to the fixing bracket.

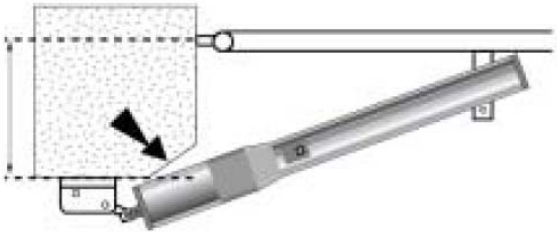


3. Unlock the actuator and adjust the stem of the actuator.
   Normally, the factory preset is already 10mm from the end of the stroke.
   If it is difficult to move the stem by hand, drive it electrically to avoid damage to the gate or kit.

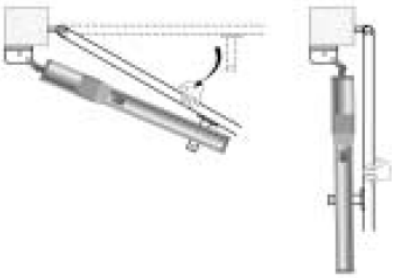


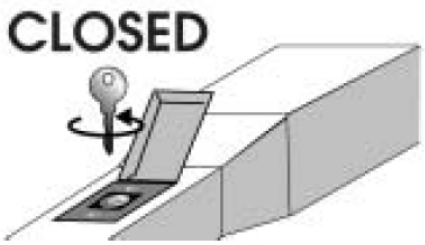


4. Fix the metal bracket on the gate and check that the actuator does not touch the pillar.
   If this is the case, it will be necessary to make a notch in the corner of the pillar.

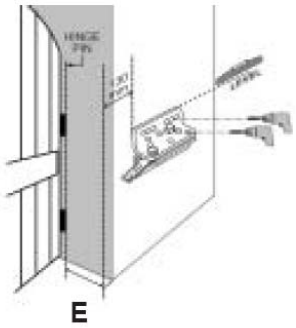


5. Test the opening of the gate manually. It must move freely by itself.
   If not, you must insert the stem of the actuator in another of the fixing bracket.
   If no problem, lock the actuator.

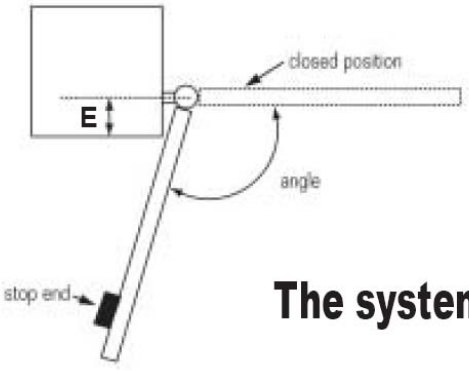




6. The position of the stop ends depends on the distance (E) of the gate hinge from
   the edge of the pillar. The table below gives the position of the stop end according to (E).

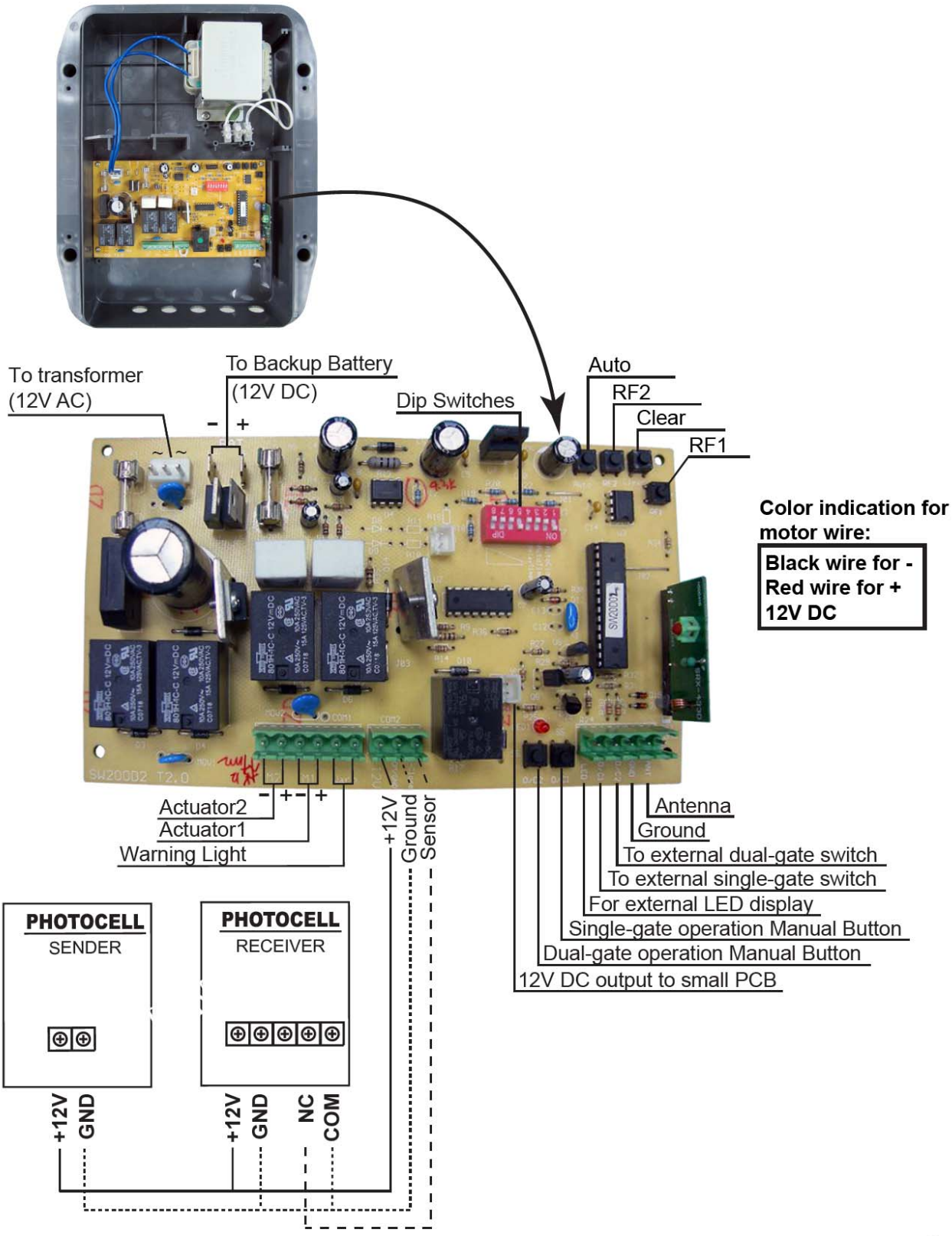


E	angle
E<12mm	120°
12mm<E<67mm	110°
67mm<E<123mm	100°
123mm<E<210mm	90°



The system is ready to program and operate.

Connection Diagram:



AC Wiring :

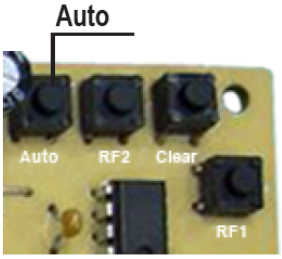
Inside of the control box, the wiring should be like the photo on the left.

Opening / Closing Learning:

Please proceed this function before using this product, otherwise the system will drive the gates improperly. E.g.: The gate can't close completely or can't open to the intended degree with some stroke length left unused.

To activate this function, press "Auto" button on the PCB for 3 seconds while the PCB is on. After release the "Auto" button, it will enter the opening/closing learning mode as below:

1. The system will close the gates first.
   Please remove any obstacle that could possibly block the gate.
   Before the actuators start, the warning light will blink for 3 seconds.
   Then Actuator 2 will close first, and then Actuator 1 will close 1 second later.
2. After 3 seconds, Actuator 1 will open the gate 1 fully,
   waiting for 3 seconds, Actuator 2 will open the other gate 2 fully.
3. After 3 seconds Actuator 2 will close fully first, waiting for 3 seconds, Actuator 1 will close fully.
4. System repeats the actions of point 2 and 3 one more time.
5. After 3 seconds, the system checks operation of Actuator 1 and Actuator 2 together.
6. After learning process succeeds, the system is ready for use.
   If the system blinks after this learning mode, which means the learning is in vain,
   please make sure that there's no obstacle on the way,
   then try again to trigger the learning mode.

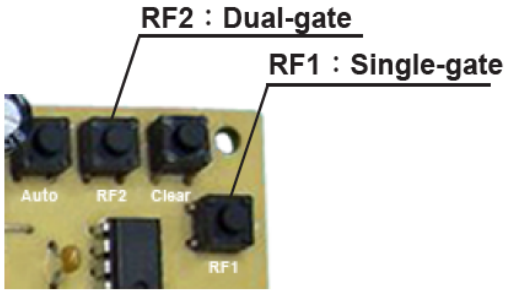


NOTE:
The Opening/Closing Learning couldn't be done successfully due to the over-weight of the gates. Then, the Current Limit needs to be adjusted. Please refer to P7 of this manual. If any assistance is needed, please contact the technicians of our agent.

Remote Learning (activation of remote control for single-gate or dual-gate):
To activate the remote control service, please proceed the following steps:

A. RF dual-gate learning: (dual-gate operation)

1. Press "RF2" key on the PCB for over 2 seconds while the PCB is on.
2. You'll see the LED light off (learning mode entered), please press any key on the remote control, LED will now blink for 3 times (learning succeeded) or light off after 10 seconds without blinking (learning failed, please try again the whole process).
3. Please repeat the step 1 and 2 to activate another remote control, otherwise the unlearnt remote control won't be recognized by the system.



B. RF single-gate learning: (single-gate operation)
Proceed with "RF1" key on the PCB and another key on the remote control as step 1~3 above.

Note: Up to 8 different RF remote control keys can be learnt for each function by this system.

Remote Control:

The remote control has 4 keys on it. Choose two of them to proceed RF learning for single-gate and dual-gate operation separately.

Operation (open, close and stop) by remote control:

The remote operation is very simple: one key press will open the gate, next press to stop, next to close the gate, next to stop...and so on.

When opening the gates:
1. Warning light will blink for 3 seconds, then Actuator 1 opens, 4 seconds later the Actuator 2 opens.
2. If the gate hits something, Actuators will reverse for 3 seconds, and the warning light will be blinking until next command received.

When closing the gates:
1. Warning light will blink for 3 seconds, then Actuator 2 closes, 4 seconds later the Actuator 1 closes.
2. If the gate hits something, Actuators will reverse for 3 seconds, and the warning light will be blinking until next command received.

Remark: The gate operation works properly only after successful Opening/Closing Learning.

Photocell:

1. During Opening:
When the loop of photocells has been intercepted, system will:
A. ignore, if the Actuator 1 has been activated. OR
B. halt, if the Actuator 1 hasn't been activated yet.
2. During Closing:
When the loop of photocells has been intercepted, system will stop closing the gates and then open both gates simultaneously until the set position.

Auto close:

30 seconds or 60 seconds later (only when this function is enabled, depends on your setting of key 1 of dip switch), warning light will blink for 3 seconds then Actuator 2 closes, 4 seconds later Actuator 1 closes. When the process finished, warning light will be switched off.

Manual gates control on the PCB:

1. The operation is the same as remote: one key press will open the gate, next press to stop, next to close the gate, next to stop...and so on.
2. Optional handset or external wall button is available. (Connected to O/C & GND terminals)

Clear RF memory:

Press "Clear" key on the PCB for over 2 seconds while the PCB is on.
You'll see the LED blinking for 2.5 seconds then the RF memory has been cleared.

Reset:

Press "Clear" key on the PCB and input AC power; keep pressing "Clear" key for over 2 seconds.
You'll see the LED blink for 5 times and be on.
Once the mentioned actions have been carried out, all RF data will be cleared.

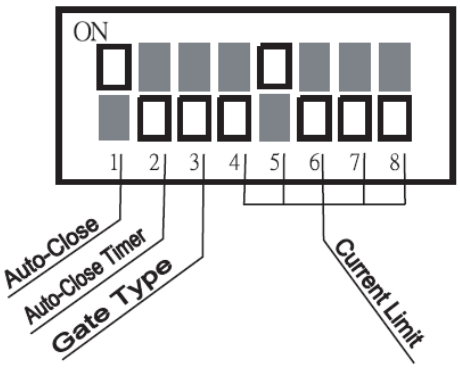
Quick release:

Use the Key to unlock the actuator to move the gates manually.

Clutch adjustment:

The SuperJack series feature a clutch mechanism inside the actuator as an additional protection.
Any adjustment for the clutch requires professional assistance.

Settings of Dip Switches:



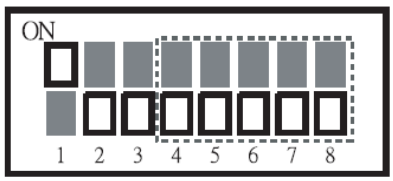
The default setting of dip switches.

Key No.	Function	ON	OFF
1	Auto-Close	Yes	No
2	Auto-Close Timer	60 Sec	30 Sec
3	Gate Type	Heavy Gate	Light Gate
4~8	Current Limit	selected	unselected

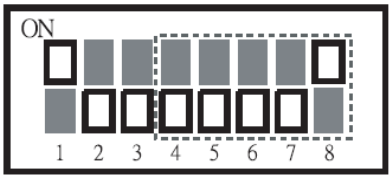
NOTE:
The current limit setting could be needed to adjustment according the weight of the gates during Opening/Closing Learning.

Approx. current limit values for different dip switch setting:

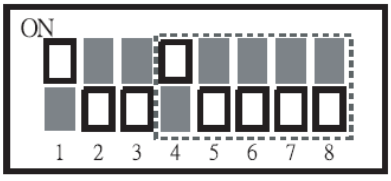
switch 4	switch 5	switch 6	switch 7	switch 8	All off
1.0A	2.0A	3.0A	3.7A	4.5A	5.2A



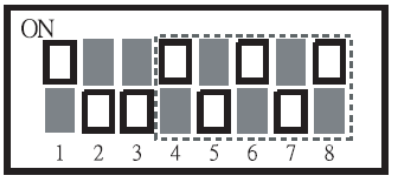
Maximum Current Limit (means also the worst sensibility, could shorten the life of motor, please try lower current limit first)



Second Highest Current Limit

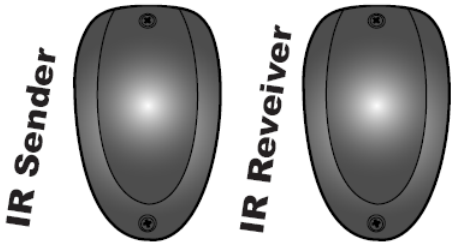


Minimum Current Limit



When user switches several switches on,
for safety reason, system will choose the lowest (switch 4instead of switch 6 or 8) current limit setting automatically.

Optional Accessories:



1 Set of Photocells

Operation of Photocells:
Select a proper installation site, where the sender and receiver can be along the same line and at the same height. Connect to the opener's PCB as wiring diagram above. Power on the system, try and see if it works properly by interrupting the IR between the sender and receiver for times. The relay in the receiver should respond accordingly while LED switches ON and OFF.

With photocell well installed, while it's triggered during opening the gates, the gates will ignore the interruption and open. While it's triggered during closing the gates, the gates will stop closing the gates and then open both gates simultaneously until the set position.

Specifications:

Model	**EasyJack Swing gate opener**
Power supply	**230VAC +/- 10%, 50Hz.**
Power motor	**12VDC**
Stroke lenghts	**350 mm.**
Operation time	**Circa 15 seconds**
Open range	**120°**
Duty cycle	**20%**
Operation temperature	**-20°C - +65°C**
Fuses	**Yes**
backup batterij	**Yes (optionel, 12V, 7Ah.)**
Automatisc closing	**Adjustable (30 of 60 seconden)**
Extra connections	**Warning lamp. infra red photocel, battery**
RF Carriage	**433.92 MHz.**
Control Range	**About 30 – 50 meter**